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Soviet Attack Tempo:
The Linchpin in Soviet Maneuver Doctrine

by
Major Richard H. Gribling
Infantry

School of Advanced Military Studies
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Fort Leavenworth, Kansas

9 March 1988

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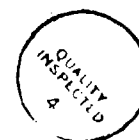
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ABSTRACT

SOVIET ATTACK TEMPO: THE LINCHPIN IN SOVIET MANEUVER DOCTRINE by
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The essence of Soviet maneuver theory rests on two tenets: rapid tempo and concentrated firepower. A dynamic relationship exists between these two conditions. For the Soviets to succeed in the attack they must organize their forces so that they can concentrate overwhelming firepower rapidly at a specific point of contact with the enemy. Tempo provides the cadence necessary for ground and air maneuver, combat support, and service support units to achieve this concentration of effort.

This paper analyzes the strengths of tempo and firepower in Soviet maneuver doctrine and determines how these strengths can be countered. This will be done first by defining Soviet maneuver theory. Then the theory will be tested by examining specific tactical examples of Soviet offensive operations during World War II on the Eastern Front. Finally, Soviet maneuver theory will be reviewed in light of present Airland Battle doctrine within the context of the Central European battlefield.

This study concludes that countering Soviet maneuver doctrine requires US commanders to focus on disrupting enemy attack tempo. This is done by extending the space and time that the Soviet's must move across the battlefield. Lengthening the battlefield must be an integrated effort combining counter-mobility planning with rapid maneuver to concentrate firepower at different moments during the fight.

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I

INTRODUCTION

Victory is achieved by a series of powerful blows delivered with increasing momentum. The art of conducting an operation consists in the achievement of a continuity of blow of ever-increasing force. The final blow¹ should be the mightiest, a crushing blow.

This quote, by Lt. General Zlobin in 1944, illustrates the key to understanding Soviet offensive doctrine. Soviet theorists are convinced that success in the offense happens when combat power is thrown against the enemy in larger and larger concentrations. This theory can be compared to waves breaking against a sandbar. The waves hit the beach with increasing intensity and frequency until the sandbar gives way.

This analogy has two important implications that helps in understanding Soviet attack doctrine. First, enough firepower must be massed to allow for a quick strike at the enemy's defense. Second, one blow will normally not be sufficient to break the enemy instead a series of blows are needed. In order to gain the maximum effects of a series of blows, they must be sequenced. By assigning a pace or tempo to these blows, an attack momentum is achieved which overwhelms the enemy. This causes the enemy either to fall or stagger back.

Like a boxer in the ring, the Soviet offensive plan is to hit the opponent with quick jabs that initially force him off balance. The speed and frequency of the blows then increases, causing the the opponent to become disoriented and, finally, to collapse with a knockout punch.

A dynamic relationship exists between massed firepower and maintaining a rapid tempo in battle. This is the essence of Soviet maneuver theory and, in turn, is the core of Soviet offensive tactics.

The chief method of operation of the Red Army is maneuvering. These are tactics which fully answer the demands of modern warfare. Their effectiveness depends upon boldness, originality and flexibility. They make it possible to strike decisive blows at the enemy, to surround him and annihilate him.²

Beating the Soviets in a conventional war means preventing them from achieving an attack tempo that allows them to deliver successive blows against their enemies. Airland Battle doctrine offers the solution for countering this Soviet offensive strategy. It focuses on disrupting Soviet offensive tempo which, in turn, destroys their ability to concentrate overwhelming firepower against the defender.

This paper is primarily concerned with analyzing the strengths of Soviet maneuver theory and then determining how these strengths can be countered. This will be done first by defining Soviet maneuver theory. This theory will then be tested by examining specific examples of Soviet offensive operations during World War II on the Eastern Front. Finally, Soviet maneuver theory will be reviewed in light of present Airland Battle doctrine within the context of the Central European battlefield.

II

SOVIET MANEUVER THEORY

The achievement of a decisive blow against an enemy involves three dynamic components: speed, mobility, and firepower. "Mere density of mass is but part of the Soviet conception; it is recognized that concentration of forces must be directed in the decisive (correct) direction and at the decisive (correct) time." ³

In Soviet doctrine speed equates to the rate of advance (kilometers per hour or kilometers per day) of the ground forces. More simply, speed equates to maneuver time. Mobility, however, involves assessing terrain and weather as it effects the rate of advance; or maneuver space.

The Soviets have learned to assess the battlefield in terms of this time and space relationship and its influence on the amount of firepower that can be concentrated against an enemy at a specific point. In fact, Soviet offensive doctrine puts higher importance on speed and mobility than on overwhelming numbers. "Possessing equal or even lesser forces than the enemy, it is [sic] possible to gain success by concentrating superior forces in the decisive direction at the decisive moment." ⁴

The Soviets refer to this time and space relationship as tempo. Tempo is significant because it sets up the opportunity for designated forces to mass combat power and deliver the decisive blow against the enemy. "One Western scholar of Soviet military art, perhaps has come closest when he describes

[tempo] as 'flexibility and agility of action which can develop opportunities and accrue advantage upon advantage'."5

The significance of tempo and its impact on Soviet maneuver theory was developed by the late British military theorist, Brigadier Richard Simpkin. In his book entitled, Race to the Swift, he defines the tempo of an operation as "the distance from the initial line of contact to the back of the final operational objective, divided by the time (in days) from the receipt of orders by the operational commander to accomplishment or abortion of the mission."6

Simpkin further breaks down tempo into seven elements: physical mobility, tactical rate of advance, quantity and reliability of information, command, control, and communication (C³) timings, times to complete moves, pattern of combat support, and pattern of logistics.⁷ Clearly, how these factors interact has a direct effect on the success of directing combat power decisively against the enemy. If the defender can influence any or all of these factors then the tempo of the Soviet attack can be disrupted.

For example, the defender may integrate terrain that is laced with numerous rivers into his defensive plan. If he is successful in making cross country movement restrictive, then the speed of combat and combat support units moving in the attack is affected. If Soviet reconnaissance units fail to identify all of the critical choke points along the attack route, then the attack risks becoming slowed or stalled. A stalled attack creates C³ problems for the Soviet commander as he attempts to mass his combat power.

The Soviets understand the effect of tempo on their ability to deliver a concentrated blow against the enemy. Colonel Vasiliy Y. Savkin, a former faculty member of the Frunze Military Academy, makes this connection in his book, entitled The Basic Principles of Operational Art and Tactics:

High tempos of advance ensure the rapid surmounting of defensive lines and zones of the enemy which have been struck, deprive the enemy of the opportunity of maneuvering from the depth and laterally with the aim of building up efforts on the decisive axis and closing breaches in the defense, and they also do not permit him to move his surviving chasti [units] and combat equipment out from under the blows of attacking troops.

Simpkin captures both definitions by quantifying this relationship of tempo to combat power with his introduction of the formula:

$$\text{MASS X VELOCITY} = \text{MOMENTUM}^9$$

Simpkin defines mass as firepower. "Firepower is the ability to transfer energy to the enemy."¹⁰ This follows closely with the Soviet definition of mass that deals "the enemy a concentrated blow, which consists of a simultaneous blow on the enemy by aviation, artillery, tanks, and infantry..."¹¹

Velocity is defined by Simpkin as length of the battlefield over the time it takes to move across it. This relationship is precisely the same as the Soviets view of speed and mobility. Another name for this space and time relationship is tempo. Simpkin regards velocity and tempo as having the same meaning.

The product of this firepower and the space and time it takes to concentrate it on the battlefield is called momentum. Simpkin explains momentum as the amount of either physical maneuver power or physical fighting power an attacking unit possesses. To explain further, physical maneuver power represents the resistance of a moving body [combat unit] to any change to speed or direction. On the other hand, physical fighting power refers to the energy exchanged by a combat unit.¹² What Simpkin implies is that there is two different kinds of momentum. Maneuver power is potential firepower that a unit projects to the enemy by moving across the battlefield. For example, a Soviet motorized rifle battalion driving deep into the opponent's rear causes the opponent to react to this action of maneuver. It must react because the battalion has potential firepower that it can unleash at will.

Conversely, fighting power is the expended energy, the result of forces concentrating on a specific point. For example, this same Soviet battalion shifts its maneuver power to fighting power once it engages the enemy with all of its direct and indirect fires. This same line of reasoning is apparent in Soviet texts when they define momentum as "combining the greatest speed of...maneuver with decisive crushing blows..."¹³

All this can be modified into a slightly different formula:

$$\text{MASS X TEMPO} = \text{MOMENTUM}^{14}$$

Tempo, then, becomes the linchpin in this formula. Without tempo, firepower cannot be concentrated. Failure to achieve this concentration results in combat units losing the ability to project fighting power or maneuvering power against an enemy. This same idea is reflected in Savkin's writing's when he states:

To attain victory over the enemy one must not dissipate his forces and means equally across the entire front, but the main efforts must be concentrated on the most important axis or sector and at the right time in order to form there the necessary superiority over the enemy in men and weapons.¹⁵

Savkin indicates another property that results from this relationship of tempo on mass. A synergy between the two is present that produces a blow or a potential blow to be directed against the enemy. Degrading this synergy breaks down the effectiveness of the blow.

Simpkin describes this synergism using a model resembling a "nut cracker." In his model, he separates the model into three parts: holding force, hinge, and mobile force.¹⁶

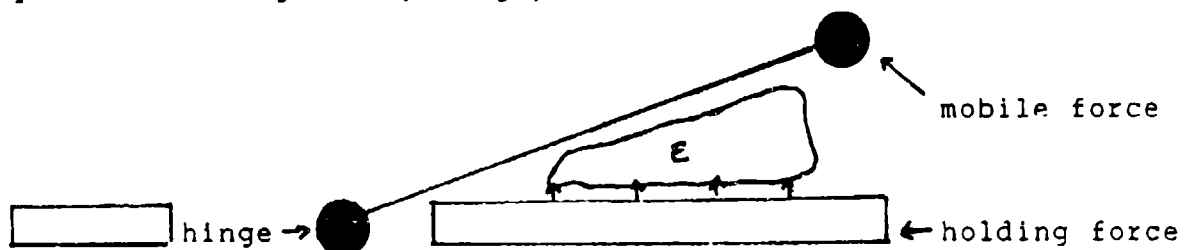


figure 1.

The holding force equates to the ground maneuver units that close with and ultimately fix the enemy. The hinge represents both the penetration that is made in an enemy's defense and the units necessary to hold the hinge. Finally, there is the mobile force, ground or air, that passes through the hinge and drives deep into the enemy's defenses.

As Simpkin explains, the synchronizing of all three components results in the annihilation of the enemy force. This synchronization occurs, in Soviet thinking, by each component adhering to an assigned tempo or pace in the attack. If one or more of these components is broken or degraded, then the necessary synergy is lost. Disrupting the attack tempo, then will achieve this loss of synergy.

Holding Force

The holding force has three functions in Simpkin's maneuver theory. First, the ground maneuver force designated as the holding force must make contact with the enemy and gain a "passage through the tactical depth of the enemy defense."¹⁷ Second, this force must secure this passage forming a hinge that will allow a mobile force to pass through. Third, this force must maintain contact with the enemy and not allow him to disengage. This third function Simpkin considers the most important in maneuver theory.

He explains that the holding force must "hold the defender forward, if possible even draw him forward, so that the mobile force can advance beyond his mass center."¹⁸ This is the critical part of maneuver theory because the mobile force can only achieve its envelopment of the enemy if the enemy's center of mass is fixed.

Mobile Force

The mobile force has two functions that affect the success of an operation of maneuver. First, the mobile force must maintain a high attack tempo. Second, at some point, it must conduct a turning movement to threaten the enemy's center of mass.¹⁹

An interesting property in maneuver theory requires the mobile force to move faster than the holding force. Simpkin indicates that the speed of the mobile force "must be at least twice that of the holding force."²⁰ This is because as the holding force is fixing the enemy it has a tendency to push him back. Thus the holding force moves forward as well. ²¹ Consequently, if the mobile force cannot maintain an attack tempo greater than the holding force's tempo, then the mobile force will fail to envelop the enemy.

The other property that is critical to the success of the mobile force is its conduct of the turning movement. At some point, as the mobile force moves deep into the rear of

the enemy, it must turn inwards. By making a turning movement it creates what Simpkin calls "leverage". "Once the attacker establishes a turning situation, the defender, while taking counter-offensive action at the tactical level, will probably be forced to...shift his mass center rearwards...."²²

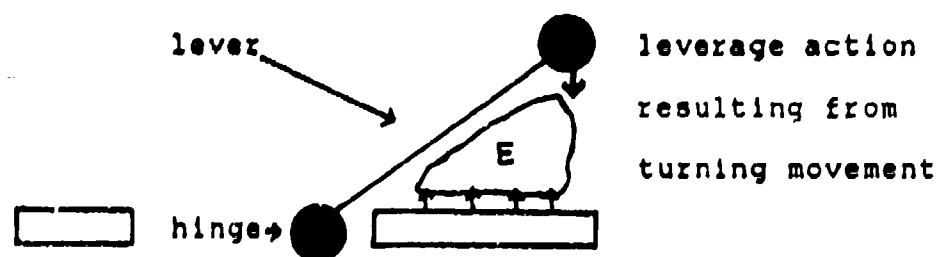


figure 2.

Counters to the Holding and Mobile Forces

Obviously, the actions of the holding and mobile forces must be synchronized if this leverage action is to occur. Disruption of this synergy can result if the enemy can force a change of tempo of either the holding force, mobile force, or both. Employing counterattack tactics by either fire or maneuver can disrupt this tempo.

The opponent must direct air and ground maneuver forces to counterattack this leverage action simultaneously at both the hinge and the tip of the lever. This will have two effects. First, attacking the hinge slows the tempo of units passing through. Without a secure hinge, the momentum of the mobile force

is disrupted. Forward progress becomes difficult and requires the mobile force to expend much of its energy in breaking through the forward defenses. Second, with much of its fighting power expended in the hinge, the mobile force has less potential fighting power to conduct the necessary turning movement needed to apply pressure on the defender's rear. Thus, the mobile force's ability to exert leverage is significantly reduced. It ends up as a loose object spinning out of control in the enemy's rear.

Second, if the enemy can prevent the mobile force from making its turning movement, then the mobile force's ability to exert leverage is abruptly reduced.

Simpkin's explanation of the relationship between the holding force and the mobile force has its roots in the maneuver theory expressed by Marshal Mikhail N. Tukachevskiy in his commentary, "New Problems in Warfare," Tukachevskiy expresses this synergistic effect as follows:

It is necessary to concentrate tremendous forces in a great hurry...the maneuver consists of a combination of successive attacks by the main forces, first against the main forces and then upon the enemy forces echeloned in the rear.²³

The dynamics of the Simpkin maneuver model is similar to the classic German maneuver theory of "schwerpunkt and aufrollen". The word Schwerpunkt refers to a concentration of forces at a decision point. Once the enemy's front defensive line has been penetrated, the attack continues to drive deep into the rear of the defense.²⁴

Accompanying the thrust is a maneuver the German's call aufrollen or "rolling out". This involved securing the flanks and widening the gap of the penetration made by the thrust.²⁵

The schwerpunkt and aufrollen theory corresponds to the action Simpkin observed by the mobile and holding forces in his maneuver model. In both, the success of the combat forces that are assigned to the development of leverage depends upon the establishment of at the penetration.

The synergy that Simpkin diagrams using his maneuver model is present in the two forms of Soviet offensive maneuver: the meeting engagement and the breakthrough. Both maneuvers rely on combat units achieving a high tempo attack that allows for a quick concentration of firepower.

Meeting Engagement

The Soviets view the meeting engagement as the most likely form of maneuver against NATO forces. They would like to surprise and catch NATO forces still moving into their initial defensive positions.²⁶ Also this maneuver is applicable when the Soviet's send independent battalions and regiments called forward detachments, deep into the rear to intercept enemy reserves that are themselves moving to blocking positions.

The meeting engagement is the most fluid of offensive situations. It is characterized by continuous reconnaissance, rapid concentration of firepower, and quick acceleration of forces into the fight. Because both forces are moving, the

amount of immediate intelligence available to the Soviet commander is limited. This presents a situation that might suggest waiting until more information is known. To the contrary, however, the Soviet commander will attempt to attack immediately, directing his effort based on the information at hand.

The dynamics that are involved between tempo and firepower are apparent in this maneuver. Because both opponents are advancing, the side that gains the initiative first should win the battle. Thus, tempo becomes the important key to gaining the initiative. The first side that can move forces quickly to concentrate and deliver its massed fires will take the initiative from their opponent.

To attain victory over the enemy one must not dissipate his forces and means equally across the entire front, but the main efforts must be concentrated on the most important axis or sector and at the right time in order to form there the necessary superiority over the enemy in men and weapons.

Simpkin's maneuver model is valid for this maneuver. Because both forces are moving toward each other, the Soviets will expect the advance guard to act as the holding force to fix the nose of the opponent. In such a meeting, when both sides are reacting to a chance contact, any unit from the march formation must be ready to act as a mobile force and move quickly to envelop the enemy.

Breakthrough

If Soviet forces are not fortunate enough to catch the enemy in a meeting engagement, they are prepared to conduct a maneuver called a breakthrough. The breakthrough is divided into two phases. First, all available firepower is directed at a specific point in the enemy's defenses resulting in a penetration. Second, this penetration is expanded by introducing follow-on echelons that continue the attack deep into the enemy's rear. Again, a dynamic relationship exists between firepower and tempo resulting in a momentum that can be either a maneuver force or a fighting force.

The Soviets recognize the synergism involved when attempting a breakthrough operation. The 1984 translation of Taktika reflects this theory:

Achieving a quick breakthrough depends largely on the good organization and decisiveness of an attack. It consists on the swift and continuous movement of tank and motor rifle subunits deployed in combat formation, combined with dense fire from tanks and APCs, and...from other types of weapons aimed at eliminating (defeating) the enemy.²⁸

As this quote illustrates, a breakthrough maneuver is the method that Soviet combat units will use to defeat an opponent conducting a positional defense. It has similar properties to the schwerpunkt and aufrollen principle. The attack is directed at the weakest part of the defense. Once the initial penetration is

made, smaller assaults are directed against the shoulders of the penetration in order to widen the gap.

The breakthrough also holds true to the Simpkin maneuver model theory. This maneuver relies on a preplanned tempo that has been determined by active reconnaissance effort. Initial contact is made to fix the enemy and develop a gap or hinge. Once the hinge is secure, second echelon forces act as the mobile force that will pass through to exploit the enemy's rear area.

Both the meeting engagement and the breakthrough maneuvers are organized in the Soviet view to maximize their maneuver doctrine. Tempo and firepower are integrated into the offense to produce momentum in the form of either maneuver power or fighting power on the enemy. Maintenance of this momentum, in the Soviet mind, results in the defeat of the opponent.

III

HISTORICAL EXAMPLES

In both offensive maneuvers the desired momentum is maintained by adhering to certain principles. These principles are present on the battlefield in the form of reconnaissance, concentrated firepower, and projecting forward detachments deep. Present Soviet doctrine outlines the importance of these principles:

The massing of forces and means is closely dependent on the selection of avenues of main attack and sectors of breakthrough (concentration of main effort).... The predominant attempt was to deliver an attack against a weak place in the enemy's defense with the aim of rapidly moving to the rear areas and flanks of his main shock grouping and to that terrain which insured the employment of all combat arms...to exploit success.

During World War II Soviet commanders, fighting on the Eastern Front, learned to synchronize firepower and attack tempo. Even with the inferiority in numbers of German troops and equipment, the Soviets only succeeded when they could concentrate maneuver units, artillery, and close air support rapidly at a decisive point.

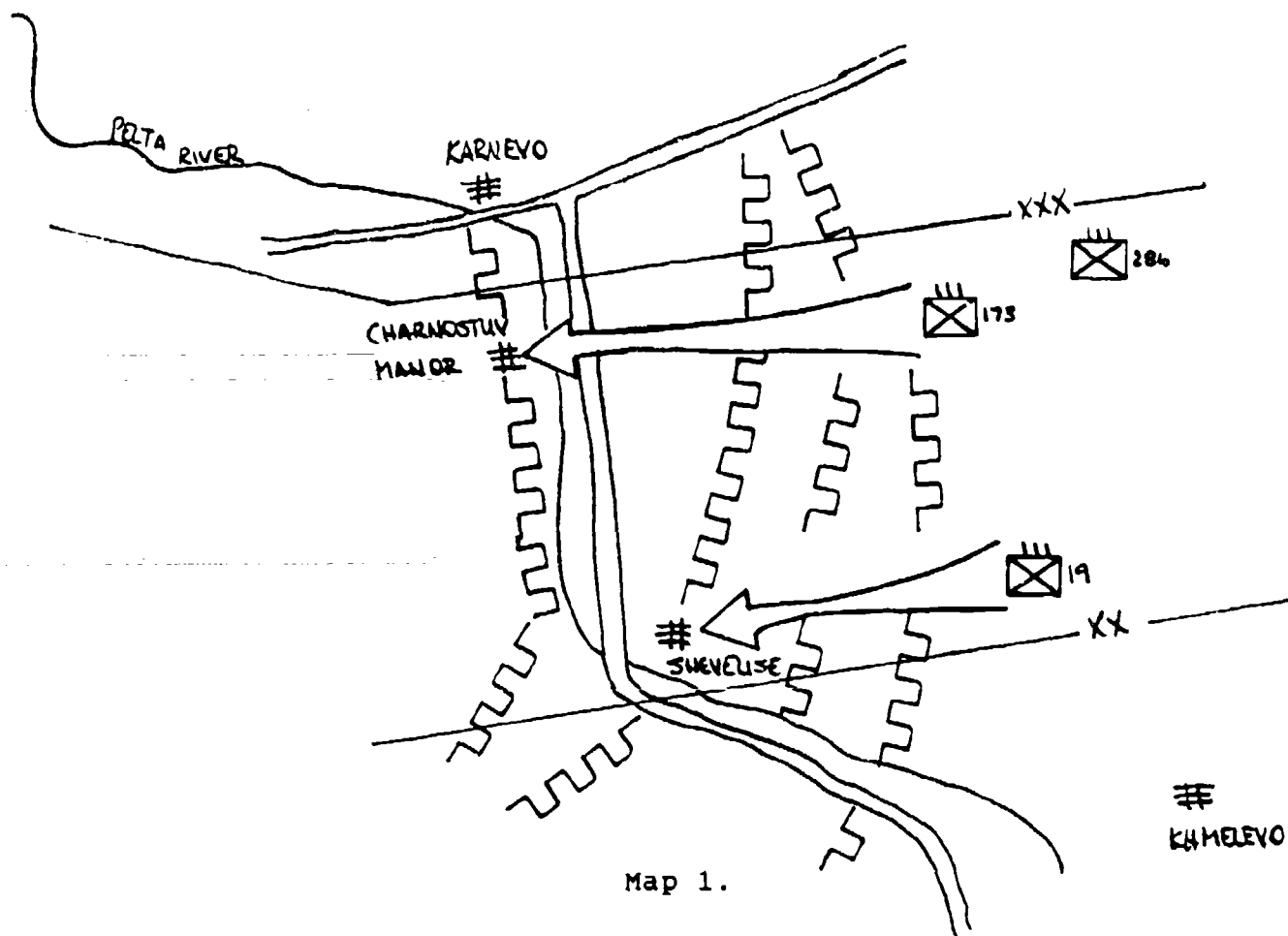
Failure normally resulted when certain practices were not coordinated during attack preparations or broke down during the execution of the attack. First, a thorough reconnaissance effort was essential in planning the attack routes. Second, all ground maneuver units with their supporting artillery, engineers, air

defense and antitank components, adhered to strict time schedules in order to achieve concentrated combat power at the decisive moment. Third, certain subunits out of each regiment were designated as forward detachments. These detachments would carry the attack deep once a penetration was made in the initial defensive line.

Reconnaissance

Gathering information surreptitiously seems to be inbred into the Russian psyche. Actions on the Eastern Front show that the Russians spent weeks conducting reconnaissance and gathering information on enemy dispositions, location of anti-tank weapons, artillery positions, obstacles, and reserve units prior to launching their attacks. Without a detailed picture of the enemy's defense, the ability of units to move quickly across the battlefield and then mass at a decisive point in the enemy's defenses would not be possible.

An example of this thorough reconnaissance effort is demonstrated by the preparations of the 90th Rifle Division in eastern Prussia, January, 1945 (Map 1). The division was conducting the main attack for the CVIII Rifle Corps. The division would lead with the 173d and 19th Rifle Regiments abreast and the 286th following and supporting the 173d. The mission was to attack west, five kilometers, seize crossings on the Pelta River and then continue the attack west for another five kilometers establishing a penetration for army follow-on forces.



Intelligence gathering was extensive in preparation for the attack. In particular, the use of engineer units and the establishment of observation posts were instrumental in discovering many of the German defenses.

Engineer teams moved along the German defensive trace locating many obstacles that would effect the initial tempo of the attack. Many of these obstacles and portions of minefields were removed prior to crossing the line of departure.

Observation posts were also established by the division. The information they obtained helped to determine the best attack routes for the lead regiments in the division.

By the time the attack started five infantry, thirty-five artillery, and four combat engineer observation points had been set up...the division had identified 107 targets before the attack. These included eleven artillery batteries, two mortar batteries, twenty-nine...pillboxes, seven machine guns...ten observation posts, one entrenched self propelled assault gun....³⁰

The results of this meticulous intelligence gathering was that the commander designated a "planned rate of advance of infantry and tanks was to be two kilometers per hour."³¹ Further, based on the engineer reports, two key avenues of attack were selected that would facilitate a rapid approach by the lead regiments. The 173d followed a northern axis orienting on Charnostuv Manor while the 19th took the southern approach passing through the village of Shvelitse.

A thorough reconnaissance of the enemy's positions, is critical in setting the pace of the attack. This same concern for acquiring accurate enemy locations prior to the attack is true today as it was in World War II. Frederick Wilson of the US Army Russian Institute writes that presently in the Soviet military, a failure to gather the necessary intelligence before a battle is unacceptable.

Soviet periodical publications do stress that an accurate estimate of the enemy situation must be accomplished, and that it is a prerequisite for success. The Soviet commander should attempt to construct in his own mind the deployment of the enemy on the forward edge of the battle area and...the likely locations of the enemy's reserve and artillery positions. Without this information an attack will probably fail, and Soviet field grade officers are very critical of such failures....³²

Concentrated Firepower

Concentrated firepower means that ground maneuver forces, artillery and mortars, antitank guns, and ground support aircraft all swarm at the decisive point and moment to deliver enough combat power to gain a penetration in a particular point in the enemy's defense.

The 322d Rifle Division, during its attack in the Ukraine Offensive in July, 1944, exemplifies the importance of concentrating both direct and indirect fires to achieve a breakthrough (Map 2).

The division would make the main attack for the XV Corps by directing all of its combat power at a portion of the German defensive line from hill 396 to Krugla Hill, a ridge line two kilometers wide.³³ The 322d would be supported by one brigade of artillery, two howitzer battalions, the second echelon artillery, and four tank destroyer artillery regiments. In all, 432 tubes of artillery and mortars would support the 322d Division's attack.³⁴

The air battle was coordinated directly by corps. Over 100 sorties were scheduled to support the 322d by striking at concentrations of German troops, in depth, to prevent any attempts of reinforcing the forward German defensive positions.³⁵

By the end of the first day of battle, the 322d Division had penetrated eight kilometers and had opened a passage through the first defensive positions.³⁶ The success of this breach was

due directly to the synchronization of both the maneuver forces and the artillery and air support that was concentrated on a two kilometer front line trace.

This accomplishment was not an easy one. The German defenses were strong. Local counterattacks were launched by the defenders throughout the first day. But, because of the ability of the division to continually concentrate its combat power rapidly, the Germans could not close the penetration.

This idea of concentrating at a decisive point and unleashing a torrent of indirect and direct fires is still considered current Soviet doctrine. Major William Cole, in his report entitled, Soviet Ground Forces: Doctrine and Capabilities, points out this fact. "The chief characteristics of the Soviet offensive will be the concentrated and violent use of all available combat means in order to destroy enemy forward defense positions...."³⁷

Forward Detachments

These mobile combat units give the Soviet commander at regiment or division tremendous flexibility in the attack. They can be as small as a battalion and as large as a reinforced regiment. They have four missions: reconnaissance in force, fixing an enemy force in advance of the main body, seizing key terrain to facilitate rapid movement of the main body, and conducting raids in the enemy rear.

Understanding why a Soviet commander uses forward

detachments is to understand the Russian attack philosophy. In the 1984 version of Taktika, certain criteria were suggested which would result in victory during an offensive battle:

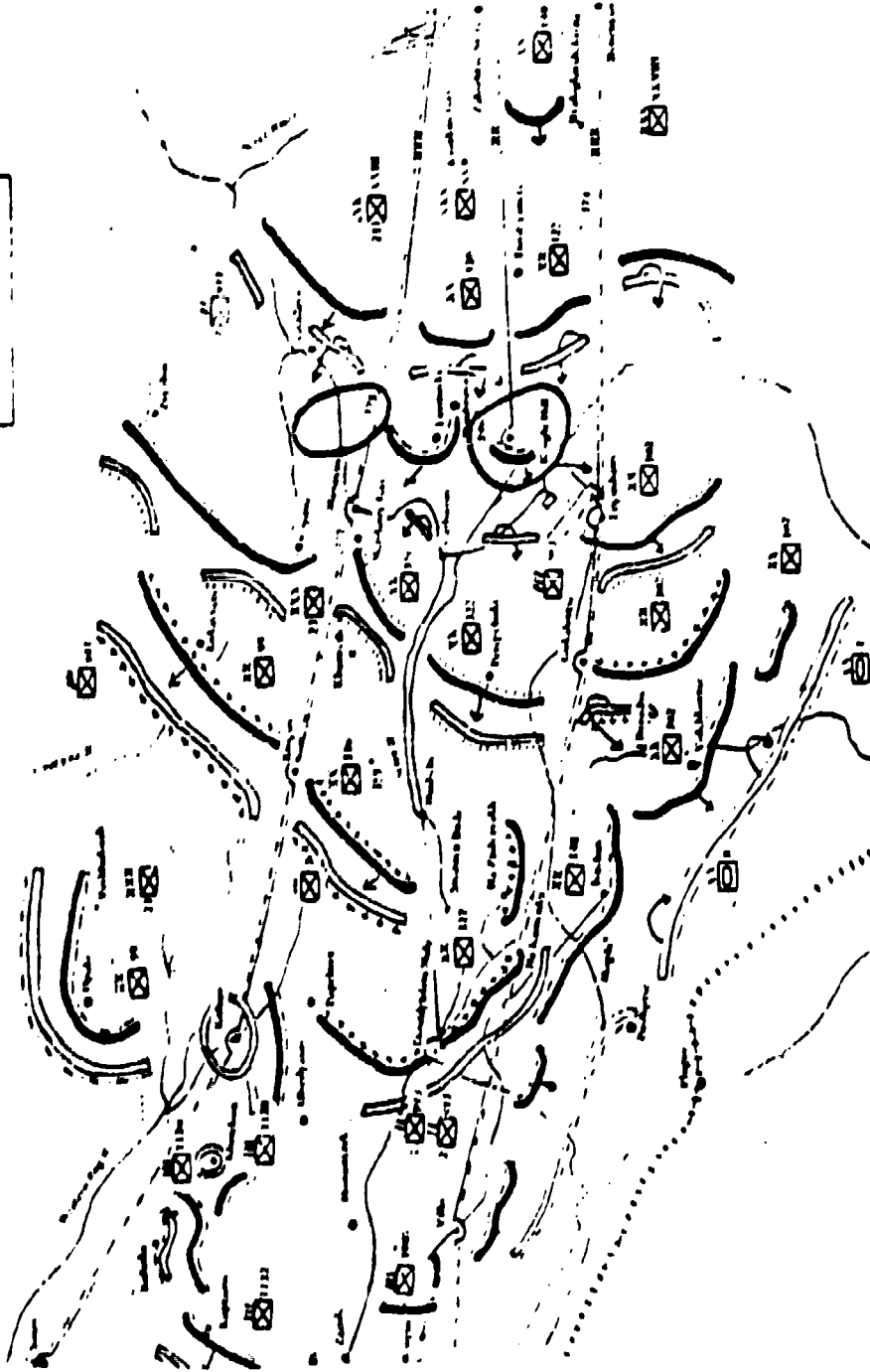
In order to succeed in a modern offensive engagement, the following factors are acquiring paramount importance: skillful organization and continuous conduct of reconnaissance...decisive exploitation by subunits...to carry out swift thrusts at considerable depth, to maneuver quickly...carry out audacious raids behind enemy lines while separated from the main body, and relentlessly pursue the enemy.

The forward detachment gives the Soviet commander the ability to meet these criteria; especially when attack tempo is so critical to the success of the operation. P. H. Vigor, in his book Soviet Blitzkrieg Theory, underscores this concept in his discussion of the forward detachment. He stated: "The second factor facilitating the speed of the Soviet advance was the creation of the forward detachment....A great deal of time was saved as a result and the speed of the advance could be maintained...."³⁹

During the Soviet offensive of the Ukraine in 1944, forward detachments were critical to the initial success of the corps attack. Although the XV Corps attack was not to begin until 1600 hours, 14 July, two detachments were ordered to attack German positions at two points along the first defensive belt (Map 3). Early on the morning of 14 July, following a thirty minute artillery preparation, one regiment from the 336th Rifle Division and one battalion from the 322d Rifle Division launched an attack.⁴⁰

Map 3.

XV Rifle Corps Operations
14-16 July 1944



The mission of these two detachments was to seize two prominent hilltops in the German defensive line and create gaps that would allow the main body to pass rapidly through and exploit deep into the German rear. By 0900 hours, the detachments had achieved a foothold on hills 375 and 396, but were encountering stiff resistance from the Germans.⁴¹

These detachments, however, held their ground, although the Germans continued to hammer away with local counterattacks:

Messages from the 322d... informed the corps commander that...a German company supported by six assault guns had counterattacked toward the position....Reports received from the 336th... showed that...up to an infantry battalion strong, supported by artillery and self-propelled guns, carried out five counterattacks....⁴²

The success of these forward detachments resulted in two important advantages for the main body of the two lead divisions. First by securing hilltops 375 and 396 the lead divisions were afforded the opportunity to wedge quickly into the enemy's defensive positions. Second, these detachments fixed the enemy and caused the Germans to wear themselves out through numerous counterattacks.

By the end of the first day of battle the 322d Rifle Division had reached the village of Perepelniki, eight kilometers from the original line of contact.⁴³ It was during the night of 14 July, a critical use of a forward detachment resulted in a significant breakthrough in the German defenses (Map 4).

The Soviets had penetrated through the first defensive positions but had not been able to breakthrough completely. Their position was tenuous for two reasons. First, the Soviet penetration was narrow enough to be pinched closed by German counterattacks. Second, the tempo of the attack risked serious degradation unless sufficient follow-on forces could break out. "In order to speed up the breakthrough of the entire German tactical zone...Third Guards Tank Army commander agreed to commit one mechanized brigade of the IX Mechanized Corps in the 322d...sector."⁴⁴

This mechanized brigade was successful in driving three kilometers deep and seizing the village of Na Zaslyayah. This action allowed the momentum to continue, keeping the Germans off balance. Captain Frederick Wilson underlines the validity of maintaining the tempo of the attack that was such a big concern in the XV Corps' offensive. "In both repulsing the counterattack and pursuing the defeated enemy, the emphasis is upon maintaining the tempo of the advance."⁴⁵

There is another dynamic that is present when a forward detachment is able to drive deep into the enemy's defensive positions. Simpkin referred to this dynamic as the force exerted by the lever.

When the mechanized brigade attacked deep toward the village of Srednya Buda, it created two effects on the German defenders. The most obvious effect was that it destroyed forces attempting to block its advance. More importantly was its effect on the enemy as it turned southwest to seize the village. Its

movement forced the Germans to direct forces at the flank of the brigade, thus diluting the German's strength of its forward defenses. In Simpkin's view this forward detachment created leverage on the enemy force. He explains the result of this action by stating, "leverage may remain a potential force....It 'turns' him-dislocates him or forces him to pull back (if he can)."⁴⁶

Breakthrough of 90th Rifle Division: Putting It All Together

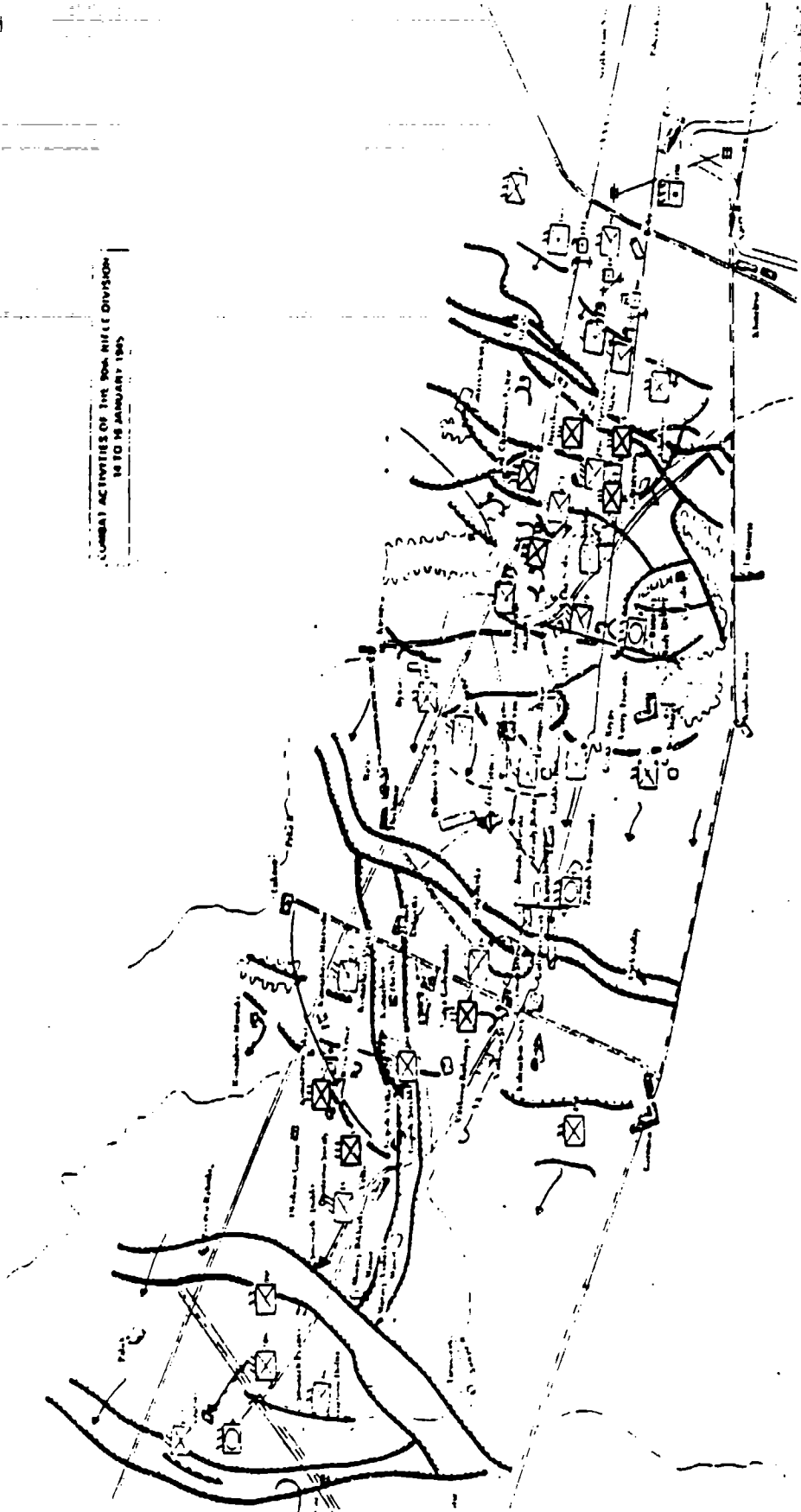
The 90th Division's offensive operation in eastern Prussia is a perfect example of a combat unit striving to achieve a rapid attack tempo through their use of reconnaissance, firepower, and mobile forces in the deep attack.

The significant phases of the attack took place over the 14-16 January, 1945 (Map 5). The division was to make the main effort for its corps by conducting first a penetration along a two kilometer sector and then continuing the attack west for a total distance of 15 kilometers by the end of the first day.⁴⁷ The preparation for this attack was meticulous. The division had three weeks to gather intelligence on the German defensive positions. Thorough reconnaissance resulted in the division being able to map out its avenues of attack, clear passages through enemy minefields, and direct its overwhelming combat power on key weaknesses in the defensive front line of the Germans.

Extensive preparation gave the division the ability to

Map 5.

COMBAT ACTIVITIES OF THE 90th AIRBORNE DIVISION
14 TO 16 JANUARY 1945



launch its first echelon infantry regiments (the 173d and 19th) at a rapid rate of advance. This allowed the concentration of forces to achieve a quick penetration of the defense. This was followed by a rapid passage of a mobile force that would maintain the momentum of the attack.

When the attack commenced, the lead regiments were initially successful in breaking through the first trench line. The high tempo of the attack allowed the rifle regiments and their support artillery and assault guns to concentrate their fires on previously determined weak spots in the line.

Battalion and regimental artillery...and tank destroyer battalions...a total of 104 guns, were assigned for direct fire missions. Each rifle battalion would be accompanied by six guns, advancing no more than 400-500 meters behind the infantry....Artillery support of the infantry was to be carried out by a method called a double rolling barrage, covering an area 2,100 meters wide and 1,600 meters in depth.

Once past the first German positions, however, the attack broke down. Strong German resistance from defensive positions behind the first trench line caused the Soviet lead regiments to slow to a crawl. For the rest of the first day, the lead regiments were faced with determined German resistance that broke up the momentum gained by the success of the first attack. The synergy of combat power that was so well coordinated initially was lacking in the follow-on attack. General Lyashchenko, 90th Division commander, reasoned that the failure of this attack was the result of tanks being used indecisively, mortar units falling behind the infantry, and artillery units caught changing firing

positions.⁴⁹

By 16 January, however, the division commander was able to achieve the synergy between reconnaissance, concentrated firepower, and the use of forward detachments resulting in a decisive breakthrough of his two lead infantry regiments. The 173d was still leading on the right but the 19th had been replaced by the 286th on the left.⁵⁰

The forward detachment of the 173d made two successful river crossings across the Pelta and Sonya Rivers in its zone.⁵¹ The success of this detachment had two positive results for the division. First, by crossing the Pelta, it created the leverage action that Simpkin discusses in his maneuver model theory. German units were pulled from their defensive positions that were oriented east toward blocking the main body of the 173d. This resulted in the main body increasing its attack tempo on those German units still in contact. Second, when the main body of the 173d pushed west, this took pressure off the 286th, the other lead regiment. Likewise, the 286th was also able to increase its attack tempo.

By midnight, both lead regiments of the 90th Division had successfully broken through the remaining defensive belts of the Germans. They attacked 18 kilometers deep and consolidated in the Pomozhe area and began preparations for the attack of the German strongpoint at Tsekhanuv.⁵²

The 90th division succeeded only after its regiments achieved an attack tempo that exceeded the German's counterattack tempo. The synergistic effect of timely reconnaissance,

concentrated firepower, and rapid exploitation by the forward detachments ruptured the German defenses.

As Simpkin's formula indicates, tempo directly impacts on the effectiveness of the combat units involved. A similar appreciation for the tempo of the attack is expressed by Colonel Savkin:

Tempos of combat operations are also inseparably connected with troop mobility. By this we mean the tempos at which the troops operate, build up their efforts, and parry the unforeseen and current efforts of the enemy for the most rapid and successful accomplishment of the missions assigned for the operation or battle.

IV

ANALYSIS

Airland Battle doctrine acknowledges that defeating an enemy attack requires US forces to concentrate on disrupting Soviet attack tempo. Loss of this tempo degrades their ability to mass overwhelming firepower on a particular point.

To counter the attacker's initiative and to prevent him from concentrating overwhelming combat power against a part of the defense, the defender must disrupt the synchronization. This may be done by separating his forces; by interrupting his fire support, logistical support, or command and control; by breaking the tempo of his operation; or by ruining the coordination of enemy combined and supporting arms.

Focusing on the enemy's tempo is the only realistic method when the opponent has the advantage in numbers of troops and weapon systems. The issue, however, is how do US commanders slow the Soviet attack pace and still retain enough concentrated combat power to defeat his forces? The solution involves extending the space and time that the enemy must move across the battlefield. The longer it takes Soviet forces to travel over the battlefield, the more opportunities US forces have to concentrate their firepower on the enemy.

This lengthening of the battlefield must be an integrated effort combining counter-mobility planning with rapid maneuver to

concentrate firepower at different points in time. It begins with an aggressive air interdiction and electronic warfare (EW) plan beyond the forward line of our own troops (FLOT). The air must effectively destroy bridges, engineer equipment, and logistical support units while the EW effort concentrates on command, control, and communication centers. The purpose of both is to effectively disrupt everything possible that the Soviets need to facilitate movement.

It continues with an intense use of both positional and mobile defenses that first fix the enemy and then maneuver quickly to counterattack any forward successes. This point of view is shared by retired General, Donn Starry:

In virtually none of the critical areas of the world to which US forces (for example) are likely to be committed, is there sufficient maneuver room to accommodate a classic defense-in-depth strategy based on a battle of attrition. The defense must, therefore, begin well forward and proceed aggressively from there to destroy enemy assault echelons and at the same time to slow, disrupt, break up, disperse, or destroy follow-on echelons in order to seize the initiative quickly at tactical and operational levels.

As General Starry suggests, attacking the enemy's tempo and ability to concentrate firepower denies him the momentum necessary to deal a decisive blow to the defender. But, this can only occur if US commanders' take the initiative early in the fight. This requires an integrated effort that combines disruption of Soviet formations far beyond the FLOT and in the security zone with the destruction of his forces in the main battle area.

By far the majority of winners in battles in which the beginning force ratios were generally within the "reasonable" limits suggested (1-6, 6-1) were those who somehow seized the initiative from the enemy, and held it to battle's end. Most often the initiative was successfully seized and held be maneuver. This seems to be true whether defending or attacking, outnumbered or outnumbering.

Beyond the FLOT

The Soviets establish their attack tempo well before their lead combat units cross the line of departure. Proper placement of engineers, artillery, and combat service support units into their march organization all contribute to establishing a rapid rate of advance. If this formation is not dispersed, then the Soviets will have achieved significant momentum that will be difficult to stop in the main battle area.

Such was the case of the German's defending against the XV Rifle Corps and 90th Rifle Division along the Eastern Front during WWII. Because the German's did not have sufficient combat assets to reach the Soviets deep, they were forced to wait for the attacking forces to arrive at their main defensive area. Consequently, the Soviets achieved a rapid attack tempo unaffected by the defender until they struck the main defensive belt. At that point, the German defenders could not react quickly enough to stop the momentum that Soviet units had achieved.

This philosophy of building overwhelming attack momentum exists today in Soviet doctrine. Therefore, US commanders must

interdict deep with air and EW assets to breakup this momentum. Keying on those enemy systems that facilitate or control movement should be the first priority.

This concern for degrading the enemy's tempo over destroying his combat systems in the deep battle was expressed by General Glenn K. Otis, Commander in Chief, US Army Europe when he stated: "Employing assets to prevent Soviet engineers from putting in a bridge may yield bigger dividends than hitting the combat unit that would have used the bridge."⁵⁷

Air interdiction is important because it offers the only reliable method of severely disorganizing the enemy while he is in his pre-battle or march configuration. The accent is on delaying the enemy's march formations and logistic life lines.

NATO's main air interdiction objectives should be delay and disruption rather than destruction...air interdiction must be able to slow the movement of enough vehicles in key areas so that Pact forces will be unable to achieve either the concentrations of cohesive units needed to penetrate NATO ground defenses or the speed needed to exploit any breakthrough that does occur.⁵⁸

Striking at command, control, and communication centers early can also cause massive delays in movement schedules. Major Steven Argersinger comments in his recent study of Soviet C³ that there are numerous command posts from the battalion on up that form a network of information cells. These are vulnerable to jamming and interception.⁵⁹ Further, once these cells become jammed, the information processing time increases. This can cause severe delays in the commander's attack schedule.

Actions in the Security Zone

Ultimately, the defender would like the covering force to accomplish three goals: destroy the reconnaissance units, deceive the enemy to where the main defensive positions are located, and force first echelon units to deploy into battle formation early.

General Donn Starry, as TRADOC commander, underscored this theme when he stated that " the Covering Force would be the first echelon of defense and fight a major battle to force the enemy to deploy his main body...."⁶⁰

A Soviet attack of an enemy in the defense will be preceded by a thorough reconnaissance effort. "The Soviet operational concept of high speed maneuver penetrating to the depths of the enemy defenses relies heavily on a successful reconnaissance effort."⁶¹ The first mission of the forces assigned to the security zone, therefore, becomes one of deception and destruction of these reconnaissance units. In most situations, the requirement to limit a unit to conducting screening operations is not enough. In order to slow the enemy's attack tempo effectively, covering force operations must be successful. By destroying enemy reconnaissance units, the defender deprives the Soviet commander of an accurate picture of the defense. This is critical to the Soviet commander because he is relying on these units to reveal combat composition of the enemy, locate important targets, update the terrain report, and reconfirm the

commander's plan for attack.⁶²

This is the core of the counter-reconnaissance mission. By denying the Soviet commander this accurate intelligence he is forced to operate in the blind. Further, without a clear picture of the enemy situation he must slow down his forward units until he has regained control of his recce situation.

A similar situation occurred to the 90th Rifle Division during its attack through East Prussia. The division leading with two regiments abreast, initially was successful in breaking through the first line of German trenches. Unfortunately, the reconnaissance effort broke down and the German units occupying the second belt of defensive positions were not discovered. This led to a bitter fight and complete loss of momentum.

This same situation must be created by today's covering force. The Soviet's must be denied continuous reconnaissance opportunities. Given the offensive doctrine of the Soviets, their reconnaissance units will attempt to locate every possible heavy weapons position, troop concentration, and obstacle well before the launching of the main attack. Further, if compromised, the recce forces will try to fix our covering forces to facilitate the rapid passage of first echelon forces into the main battle area. The covering force, then, is faced with a dilemma. It must destroy the reconnaissance elements and force the first echelon units to deploy into attack formation without becoming overwhelmed by follow-on forces.

FM 100-5, Operations, offers the only realistic solution. The covering force must accept being cut off temporarily from

forces in the main battle area. Elements of the covering force will occupy advanced positions, forward of the FEBA, providing observation to facilitate counterattacks by other forces as well as to counterattack itself into the flank and rear of the attacking first echelon.⁶³

Actions in the Main Battle Area (MBA)

The success of US forces to defeat Soviet forces in the MBA will depend in large part on the successes of the air interdiction campaign and the covering force operation. If the enemy's attack tempo has been sufficiently disrupted, then opportunities will exist for US forces to concentrate first on destroying Soviet artillery and then on the ground maneuver forces as they attempt to force a breakthrough.

Enemy artillery, in particular, must be destroyed quickly. To allow it to operate in the close battle will negate all the success gained by the air and covering forces. The Soviets will use their artillery to regain lost momentum during the attack. Artillery fires will concentrate to disrupt enemy defensive positions long enough to allow follow-on forces to breach the defense. Countering this massive artillery threat requires accurate and timely target acquisition information so that counter-battery fires can be initiated.

In addition, every US antitank weapon system that can be pinpointed will be targeted by Soviet artillery. The Soviets will not risk attacking through antitank weapons that have not

been neutralized by their artillery. One clue of this concern is how they calculate enemy defensive depth on the Western European battlefield. "The density of the defense...is usually expressed in terms of anti-tank weapons (units) per kilometer of front in the tactical zone..."⁶⁴

They have also taken the ATGM into account when calculating the rate of advance of the main body during a breakthrough attack.

It appears...that the rate of 2-3 km/hour accepted by Soviet planners for the battle in the tactical zone under modern conventional conditions given a superiority of 3:1 or more represents the upper limit.⁶⁵

Setting such a high attack tempo is possible, according to the Soviets, because the rapid concentration of combat power will cause the defense to be disrupted long enough to become overrun. "An ATGM will take 1 to 1.2 minutes to be put back into action....This allows the attacking force to be inside the defensive position before it can be reestablished."⁶⁶

US commanders, then, must emphasize counter-battery engagements and counter-mobility planning to deny the Soviets the ability to concentrate their artillery fires. Failure to stop massed Soviet artillery fires is the first step to losing the MBA fight.

If the defender is able to slow and disrupt the synchronization of the attackers use of artillery, then the destruction of the enemy ground maneuver units is possible. The defender must be able to counterattack against all penetrations. This is the one critical element that German after action reports

all agreed on during the German defense on the Eastern Front. "Germans regarded the counterattack as perhaps the most potent of all the defenders' weapons....German officers routinely set aside their best leaders, troops, and weapons as local reserves and, at the earliest opportunity, sent them crashing into the flank of any break-in."⁶⁷

Counterattacks must be executed at every level of the defense. This requires commanders to achieve quick acceleration of their reserves and thus gain a higher tempo than the attacker. "Speed was emphasized more than mass, and for this reason, every unit in contact with the enemy from squad level up was trained to initiate its own counterattack as soon as possible...."⁶⁸ Demanding immediate counterattacks at every level of command allows the defender more opportunities to take the initiative from the attacker. Also it insures that larger reserves are saved to challenge the major breakthroughs.

Maintaining large reserves is necessary for an eventual Soviet breakthrough somewhere along the FEBA. The result will be the break out of a mobile force moving rapidly into the depth of the defense. Any initial break out force could potentially be a forward detachment. If these detachments go unchecked, they will provide the next hinge for other follow-on forces to pass through. In particular, they often lead operational maneuver groups (OMGs). Consequently, these forces must be destroyed. "Unable to ascertain with any degree of certainty that a Soviet tactical element is or is not a forward detachment...each such unit encountered...will of necessity have to be eliminated."⁶⁹

Germans fighting on the Eastern Front used their limited air support as a rapid mobile reserve to launch against forward detachments that had succeeded in driving deep into the German rear area. This judicious use of air threw these forward detachments off-balance and bought time for German ground maneuver units to reposition in an attempt to block the advance.

A similar situation presents itself today. US commanders must expect that penetrations will occur. The use of close air support and attack helicopters provides the quickest response to blunting the deep penetration by forward detachments. Attack helicopters, in particular, give the defender assets that can respond immediately to any enemy deep attack. They give that US commander a quick counterattack force that can cross the battlefield faster than the attacking forward detachment. Thus, its higher attack tempo allows for more opportunities to concentrate its firepower causing the enemy initially to slow and finally stop its attack. Simpkin describes this reaction as follows: "To stop the advancing force the defender needs, first, an intense concentration of firepower in time and space--above all in time--to nullify the dynamic forces; then a short, sharp counter-stroke to throw the enemy into reverse...."⁷⁰

Halting the forward detachment also buys more time for the defender by creating confusion as to the commitment of Soviet follow-on forces. Soviet periodicals suggest that the decision to deploy the main body hinges upon the success of the advance guard. Disrupting and eventually destroying these forward detachments can cause hesitation on when to commit the second

echelon. Any hesitation by the Soviets gives the US commander time to mass his combat power for a suitable counterstroke. Present US forces have significantly increased their ability to traverse the battlefield to take advantage of any hesitation in a Soviet attack. By combining the immediate reaction time of air, with the increased speed of the M1 battle tank and M2 Bradley, the defender now has the ability to accelerate his attack tempo and maneuver to concentrate sufficient firepower and destroy Soviet forces that have penetrated deep.

V

CONCLUSION

The essence of Soviet maneuver then rests on two tenets: a rapid tempo and concentrated firepower directed on a specific point. When these two factors are combined together, the Soviets feel that the enemy at the point of contact can be overwhelmed and defeated. The Soviets call this achieving a breakthrough.

A US defense cannot stop a breakthrough by simply returning a blow for a blow. The Soviets have the advantage of numerical strength in both men and equipment. They have combined this strength with a philosophy that relies on high tempo and overwhelming massed fires to achieve a breakthrough followed by a rapid exploitation.

The US can counter this doctrine by focusing on the disruption of that tempo and seizing the initiative through violent counterattacks. This is a doctrine of maneuver; one that underscores the need for seeking opportunities to wrest the initiative from the attacker.

The German campaigns of WWII along the Eastern Front provide examples that have application today. Their relative success in defending across a broad front, against superior numerical forces was achieved by executing initiative, agility, depth, and synchronization; the tenets of today's Airland Battle doctrine.

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